REMARKS

This paper responds to the Office Action mailed on <u>February 9, 2007</u>.

Claims 1-26 are canceled without disclaimer or prejudice; claims 27-36 are added; as a result, claims 27-36 are now pending in this application.

New claims 27-36 are fully supported by the specification as originally filed. No new matter is added.

§101 Rejection of the Claims

Claims 8-10 and 23-24 were rejected under 35 USC § 101.

Applicant respectfully traverses.

Applicant submits that claims 8-10 and 23-24 satisfy 35 USC § 101. However, to expedite prosecution, Applicant cancels claims 8-10 and 23-24 without disclaimer or prejudice. Therefore, the rejection of claims 8-10 and 23-24 under 35 USC § 101 is now moot.

§112 Rejection of the Claims

Claims 8 and 23 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant respectfully traverses.

Applicant submits that claims 8 and 23 satisfy 35 USC § 112, second paragraph. However, as mentioned above, Applicant cancels claims 8 and 23 without disclaimer or prejudice to expedite prosecution. Therefore, the rejection of claims 8 and 23 under 35 USC § 112, second paragraph is now moot.

§102 Rejection of the Claims

Claims 8-10 and 23-24 were rejected under 35 USC § 102(e) as being anticipated by Nakamura (U.S. 5,926,398).

Applicant respectfully traverses.

Applicant does not admit that Nakamura is prior art with respect to claims 8-10 and 23-24. However, as mentioned above, Applicant cancels claims 8-10 and 23-24 without disclaimer or prejudice to expedite prosecution. Therefore, the rejection of claims 8-10 and 23-24 under 35 USC § 102(e) is now moot.

New Claims

Applicant believes that new claims 27-36 are not anticipated by Nakamura because Applicant is unable to find in Nakamura the things recited in claims 27-36. For example, Applicant is unable to find in Nakamura the things recited in each of the independent claims 27-36 such as "grouping at least one instance of a first template in the logic design based on the control input and a databus input for the logic design to generate a first vector of the set of vectors, the databus input including at least one databus identifier" and "grouping at least one instance of a second template based on circuit connectivity of the logic design to generate a second vector of the set of vectors".

Nakamura teaches a method of arranging functional cells including a step of arranging these functional cells into groups based on wiring signals, and a step of rearranging these *same* functional cells in each of the groups based on an arranging order. For example, in step S12 of FIG. 9, Nakamura arranges functional cells 9 (shown in FIG. 10) into groups 6 based on wiring signals, and then in step S14 of FIG. 9, Nakamura rearranges these *same* functional cells 9 (which were already grouped based on wiring signals) into groups with new connections (as shown in FIG. 11) based on an arranging order. Thus, Nakamura teaches arranging and rearranging the *same* components (e.g., the *same* functional cells) into groups. Applicant is unable to find in Nakamura a teaching of grouping at least one instance of a first component (e.g., function cell of Nakamura) into a first group (or first vector), and grouping at least one instance of a second component (*not* the same as the first component) into a second group (or second vector). In contrast, each of the independent claims 27 and 33 recites, among other things, grouping at least one instance of a "first template" in the logic design based on the control input and the databus input to generate a "first vector" of the set of vectors, and grouping at least one instance of a "second template" based on circuit connectivity to generate a "second vector" of the set of vectors.

Nakamura also mentions other conventional layout methods with reference to FIG. 3 through FIG. 6. In a first conventional layout method, Nakamura mentions function cells being grouped based on *cell rank length limiting value* (see for example, Nakamura, col. 3, ll. 28-42, and FIG. 3 and FIG. 4). In a second conventional layout method, Nakamura mentions function cells being grouped based on *group name* of each of the functional cells (see for example, Nakamura, col. 3, ll. 43-56, and FIG. 5). In a third conventional layout method, Nakamura mentions function cells being grouped based on *instance name* of each of the functional cells (see for example, Nakamura, col. 3, ll. 57-65, and FIG. 6). In these conventional layout methods mentioned by Nakamura, Applicant is unable to find a teaching of the things recited in each of the claims 27 and 33 such as grouping at least one instance of a first template in the logic design based on "the control input and a databus input" for the logic design to generate a "first vector" of the set of vectors, and grouping at least one instance of a second template based on "circuit connectivity" of the logic design to generate a "second vector" of the set of vectors.

The reasons presented above demonstrate that claims 27 and 33 are not anticipated by Nakamura. Accordingly, Applicant requests consideration and allowance of claims 27 and 33.

Claims 28-32 depend from claim 27, and claims 34-36 depend from claim 33. Thus, Applicant believes that claims 28-32 and 34-36 are also not anticipated by Nakamura for at least the reasons presented above regarding claims 27 and 33, plus the additional things recited in claims 28-32 and 34-36. Accordingly, Applicant requests consideration and allowance of claims 28-32 and 34-36.

RESERVATION OF RIGHTS

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are

relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 349-9592) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SUDHAKAR KALE ET AL.

By their Representatives,
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, Minnesota 55402
(612) 349-9592

By /_____/

Ann M. McCrackin
Reg. No. 42,858